

Room Temperature Electrolyzers For Oxygen Generation On Mars, Phase I

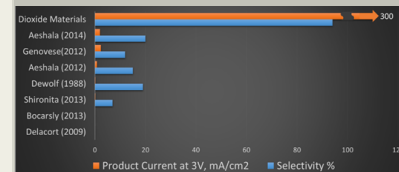
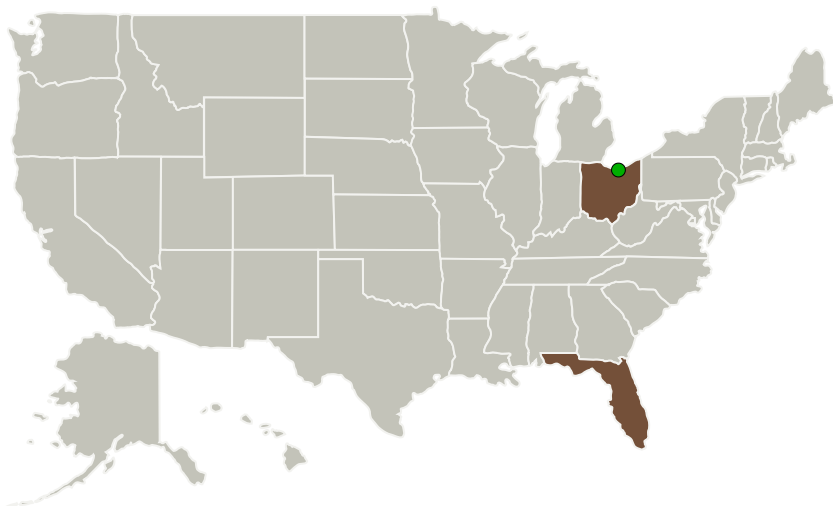
Completed Technology Project (2015 - 2015)



Project Introduction

The objective of this proposal is to adapt Dioxide Materials' CO₂ electrolyzers now being developed under ARPA-E support for NASA missions.

Primary U.S. Work Locations and Key Partners



Room Temperature Electrolyzers For Oxygen Generation On Mars, Phase I

Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	1
Images	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	3
Technology Areas	3

Organizations Performing Work	Role	Type	Location
Dioxide Materials, Inc.	Lead Organization	Industry	Boca Raton, Florida
● Glenn Research Center(GRC)	Supporting Organization	NASA Center	Cleveland, Ohio

Primary U.S. Work Locations

Florida	Ohio
---------	------

Project Transitions

▶ **June 2015:** Project Start

Room Temperature Electrolyzers For Oxygen Generation On Mars, Phase I

Completed Technology Project (2015 - 2015)



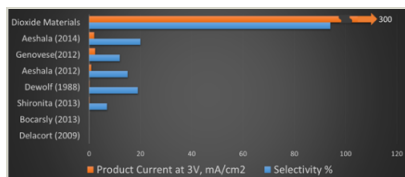
December 2015: Closed out

Closeout Summary: Room Temperature Electrolyzers For Oxygen Generation On Mars, Phase I Project Image

Closeout Documentation:

- Final Summary Chart Image(<https://techport.nasa.gov/file/139300>)

Images



Briefing Chart Image

Room Temperature Electrolyzers For Oxygen Generation On Mars, Phase I

(<https://techport.nasa.gov/image/133951>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Dioxide Materials, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Rich Masel

Co-Investigator:

Rich Masel

Room Temperature Electrolyzers For Oxygen Generation On Mars, Phase I

Completed Technology Project (2015 - 2015)



Technology Maturity (TRL)

Start: **3**
Current: **4**
Estimated End: **4**



Technology Areas

Primary:

- TX03 Aerospace Power and Energy Storage
 - └ TX03.2 Energy Storage
 - └ TX03.2.3 Advanced Concepts for Energy Storage